



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,467	09/22/2003	Ben E. Boatwright	0671/8	5520
7590	10/18/2006		EXAMINER	
MASON, MASON & ALBRIGHT			SCHATZ, CHRISTOPHER	
2306 South Eads Street			ART UNIT	PAPER NUMBER
P.O. Box 2246				
Arlington, VA 22202			1733	

DATE MAILED: 10/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/665,467	BOATWRIGHT ET AL.
	Examiner	Art Unit
	Christopher T. Schatz	1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 04 August 2006.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-37 is/are pending in the application.

4a) Of the above claim(s) 4,5 and 12 is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-3,6-11 and 13-37 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_.

## **FINAL REJECTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 6, 7, and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites the limitation "applying a bead of glue between the backing of said carpet and said edge." There is insufficient antecedent basis for this limitation in the claim because the claim never previously refers to a backing.

Claims 7 and 25 recite the limitation "wherein said piece of binding material is attached to the underside of said carpet." There is insufficient antecedent basis for this limitation.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamrah '698 in view of Mitchell '327.

Hamrah discloses a method of binding an edge of a material without stitching, the binding to said material comprising a binding fabric (figure 1) adhered on at least one side with a double-sided adhesive tape 30 (column 2, lines 17-31), and securing said material to be bound to said binding fabric by said adhesive tape 30 extending from said binding fabric (figures 1, 2, column 2, line 8 – column 3, line 8).

The reference is silent as to securing piping in a pocket. Mitchell discloses a method for binding an edge of a material 15 (figure 3), said method comprising securing piping 12 in a pocket formed by folding over a binding fabric 11 on itself (figures 1 and 2), and securing said material to be bound to the binding fabric wherein the end of said material is abutting a welt (column 2, line 58 – column 3, line 8). Mitchell discloses welting cords and piping are well known in the art and advantageous because said welting cords reinforce and decorate the edge of the material (column 1, lines 6-10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hamrah '698 such that binding fabric 22 is folded over on itself to form a pocket in which a welting material can be secured. By modifying Hamrah in such a way, the banded edge of the material in Hamrah would be favorably reinforced and provide an aesthetically pleasing appearance as taught by Mitchell above. As to claim 21, applicant replaces the term "piping" in claim 1 with the term "welting substance" in claim 21. Examiner asserts that the piping 12 of Mitchell reads on the term "welting substance", and thus claim 21 is rejected for the same reasons as set forth in the discussion of claim 1 above.

5. Claims 2, 3, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamrah and Mitchell as applied above, and in further view of Callas '202 and Ang (US 2002/012376).

Hamrah and Mitchell disclose a method as stated above, but the references are silent as to placing a bead of adhesive in between said material and the welt. Callas discloses a method of binding an edge of a material, said binding material comprising a binding fabric 22 with an adhesive, and the reference further discusses the drawbacks of the method of Hamrah – namely that the method of Hamrah fails to properly prevent water and dirt from accumulating between the binding material and the edge of the material (column 1, lines 24-35). Callas proposes that to solve this problem the edge of the material can be adhesively secured to the bottom portion of the binding fabric *and* the side portion of the binding fabric via adhesive 33 (column 1, lines 51-60, column 5, lines 4-20). Examiner acknowledges that the Callas discloses a strip of adhesive, however, Ang et al. discloses that it is well-known in the art to use a bead of adhesive in place of an adhesive strip when bonding the side edge of a material to a binding fabric (paragraph 0013). Additionally, Ang et al. discloses that it is well known to use a thermoplastic adhesive in place of an adhesive strip (paragraph 0053). Thus, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the method disclosed by the combination of Hamrah and Mitchell by placing an adhesive in between the material and the welt formed over the adhesive strip as taught by Callas above such that both the bottom of the binding fabric and the side portion of the binding fabric containing the welt is bonded to the edge of the material. Making such a modification would prevent water and dirt from accumulating in between the edge of the material and the portion of the binding fabric containing the welt. Additionally, at the time of the invention it would have been obvious to a person of ordinary skill in the art to use a thermoplastic adhesive bead for the adhesive to be placed in between the material and the welt because Ang et al. teaches above that doing so is an alternative to the adhesive strip 33 of Callas.

As to claims 3 and 22, Callas et al. teaches that an adhesive is pre-applied to element 18 and subsequently bound by melting of the thermoplastic. While examiner acknowledges that Callas et al. does not explicitly disclose that element 18 is a “welt” examiner asserts that one of ordinary skill in the art reading Callas would have readily recognized that an adhesive could be pre-applied to the welt of Mitchell since element 18 performs a similar function (reinforcement) as the welt in the method of Hamrah and Mitchell performs. Applicant should further note that it would have been obvious to a person of ordinary skill in the art to use a thermoplastic hot-melt bead in place of Callas’ strip 33 for the reasons discusses above. Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to pre-apply a thermoplastic adhesive bead to a welt and subsequently bound said adhesive bead by a heating means.

6. Claims 6-8, 14, 19, 24-26, 31, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamrah in view of Callas and Ang et al.

Hamrah discloses a method of binding an edge to a carpet, said method comprising: securing a piece of binding material to said edge so that it extends outwardly along one side of said edge; attaching said piece to an underside of said carpet so that said edge abuts said carpet (figure 2, column 2, line 8 – column 3, line 8). The reference is silent as to applying a bead of glue between a backing of said carpet and an edge. Callas discloses a method of binding an edge 18 to a carpet 11, and the reference further discusses the drawbacks of the method of Hamrah – namely that the method of Hamrah fails to properly prevent water and dirt from accumulating between the binding material and the edge of the carpet (column 1, lines 24-35). Callas proposes that to solve this problem, the backing of the carpet can be adhesively secured to the bottom

portion of the binding fabric and the edge via adhesive 33 (column 1, lines 51-60, column 5, lines 4-20). Examiner acknowledges that Callas discloses a strip of adhesive, however, Ang et al. discloses that it is well-known in the art to use a bead of adhesive in place of an adhesive strip when bonding the backing of a carpet to an edge (paragraph 0013). Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the method disclosed by Hamrah by placing a bead of glue in between the backing of the carpet and an edge as suggested by Callas and Ang et al. and permitting said glue to cure whereby said backing of said carpet is bonded to said edge. Making such a modification would prevent water and dirt from accumulating in between the edge and the backing of said carpet.

As to claim 24, applicant replaces the term “backing” in claim 6 with term “vertical side” in claim 24. Examiner asserts that glue is applied between a vertical side of said carpet and said edge in the method of Callas, and thus claim 24 is rejected for the same reasons as set forth in the discussion of claim 6 above. As to claims 7 and 25, Hamrah discloses a method wherein the piece of binding material is attached to the inside of said carpet by disposing a planar material 30 between the bottom of said carpet and said piece of material, said planar material having an adhesive on both sides thereof (figure 2, column 2, lines 17-38). As to claims 8 and 26, Ang et al. discloses a method wherein said bead of glue is composed of a thermal plastic adhesive (paragraph 0053). As to claims 14 and 31, Hamrah discloses a method wherein a protective material 32 on the upper side of said planar material is removed before said planar material is secured by said adhesive to the bottom of said carpet (figure 1, column 2, lines 32-35). As to claims 19 and 36, Hamrah et al. discloses a method wherein said edge comprising a binding.

Applicant should note that the edge 22 is formed of a “carpet binding tape” and thus examiner asserts that “carpet binding tape” reads on the term binding.

7. Claims 9 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamrah, Callas, and Ang et al., as applied above, and further in view of Tolbert (2001/0001300) (newly cited). Hamrah, Callas, and Ang et al. disclose a method as discussed with respect to claim 6 above, and Ang et al. further discloses the use of hot-melt adhesives. The references are silent however, as to the specific means in which said hot-melt adhesive is applied. Tolbert et al. is directed to a method of binding materials wherein a bead of hot-melt adhesive is applied to bind said material. Tolbert et al. further discloses that application of a hot-melt bead of adhesive with a hot glue gun is a well-known and conventional application method (paragraph 0058). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply a hot-melt bead of glue with a hot glue gun as is conventional in the art and taught by Tolbert et al. above in the of bonding and edge to a carpet as set forth above by Hamrah, Callas, and Ang et al. The disclosure of Tolbert et al. that use of a hot glue gun is well known and conventional in the art is evidence that it was proper for examiner to take Official Notice with respect to claim 9 in section 10 of the office action dated April 18, 2006.

8. Claims 10, 11, 13, 15, 16, 18-20, 28, 21, 30, and 32, 33, and 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamrah, Callas and Ang et al., as applied above, and in further view of Mitchell.

Hamrah, Callas, and Ang et al., discloses a method as stated above, but the references are silent as to an edge wherein said binding material is wrapped around a welt material. Mitchell discloses a method of binding an edge to a carpet 15, wherein said method comprises securing a

piece of binding material 11 to an edge; attaching said piece to an underside of the carpet such that said edge abuts said carpet, wherein said edge comprises binding material wrapped around a welt material 12 (figures 1-3, column 2, line 57 – column 3, line 8). Mitchell discloses welting cords are welt known in the art and advantageous because said welting cords provide reinforcement and decorative effects (column 1, lines 6-10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Hamrah such that the edge of binding material 22 disclosed by Hamrah is wrapped around a welt material. By modifying Hamrah in such a way, the binded edge of the material in Hamrah would be favorably reinforced and provide an aesthetically pleasing appearance as taught by Mitchell above.

As to claims 11 and 29, Mitchell discloses a method wherein said welt material is substantially circular in cross-section (figures). As to claims 13 and 30, examiner asserts that it would have been well within the purview of one of ordinary skill in the art to the increase the angle between the backing of the carpet and the edge to receive the bead of glue. Performing such a step would increase the space necessary for the hot glue gun used to dispense said adhesive, and also reduce the risk of glue adhering to any of the carpet naps or fibers. Examiner further asserts that after said bead of glue is applied, one of ordinary skill in the art would naturally decrease the angle before said glue is cured such that said edge is properly positioned when the glue cures. As to claims 15 and 32, Mitchell discloses a method wherein said edge comprises cord (figures). As to claims 16 and 33, Mitchell discloses a method wherein said edge comprises binding material 11 which has been stitched such that it encircles a welt material (figures 1, 2, column 2, lines 61-66). As to claims 18 and 35, Mitchell discloses a method

wherein said edge comprises piping (figures). As to claims 19 and 36, Mitchell discloses a method wherein said edge comprises a binding (figures). As to claims 20 and 37, Mitchell discloses a method wherein said welt material consists of welt material which is substantially circular in cross-section or welt material which is substantially D-shaped in cross-section or a combination thereof (figures).

9. Claims 17 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamrah, Callas and Ang et al. as applied above, and in further view of Kim et al. '524.

Hamrah, Callas and Ang et al. disclose a method as stated above, but the references are silent as to a metal element within said adhesive wherein said metal element heats and melts said adhesive when subjected to radiation. Kim is directed to a bonding method and discloses that it is well known in the art to melt thermoplastic adhesive material by subjecting a radio frequency (RF) sensitive material inside said thermoplastic resin to radiation such that said RF sensitive material heats up and melts the adhesive (column 2, lines 34-44, column 4, lines 24-46). The reference further discloses that metal can comprise one such RF sensitive material. The advantage of using metal as an RF sensitive material and subjecting said thermoplastic adhesive to radiation is that by doing so, one avoids subjecting the product being bonded to high temperatures, thus reducing the risk of damaging the material. Furthermore, because metal has a higher RF sensitivity than thermoplastics, use of metal accelerates the melt rate of the thermoplastic. Therefore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the method disclosed by Hamrah, Callas and Ang et al. by placing metal elements in the thermoplastic adhesive bead and subjecting said bead to radiation such that said metal heats up and melts the thermoplastic adhesive bead as taught by Kim et al.

above. Such a modification would reduce the risk of damaging the carpet or edge and also speed up the melting rate of the thermoplastic adhesive bead.

***Response to Arguments***

Applicant's arguments filed July 18, 2006 have been fully considered but they are not persuasive. Applicant states that all of the rejections are based on 35 U.S.C. 103 by using a plurality of references. Examiner respectfully notifies that applicant that such a fact is not germane to the patentability of the invention. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Applicant states that Hamrah does not disclose the adhesive material 30 as a double-sided pressure sensitive adhesive. Examiner respectfully disagrees. The reference explicitly discloses that tape 30 adheres to surface 18 (column 2, lines 17-23) and that the top surface of the tape (the surface covered by the release strip) has adhesive properties. Applicant further states that "Hamrah's disposition of his strip of pressure sensitive material 30 could not, if folded over in the instant invention (which it is not), substantially abut a welt formed over the adhesive tape." Such an argument is not commensurate with the scope of applicant's claim because applicant's claim does not require a pressure sensitive material to be substantially abut a welt; rather, the

claim requires that the end of said material substantially abut a welt formed over said adhesive. Applicant is further notified that the claims, as currently written, *do not require* that the adhesive tape be folded over. The claims only require that the binding fabric be folded over. Applicant states that Mitchell does not teach either how either the band 14 or the strip 11 should be attached to a carpet. Examiner asserts that it is not necessary for Mitchell to make such a disclosure. Applicant should note that Hamrah discloses that a binding fabric is attached to the back side of a carpet. It is the position of the examiner that it would have been obvious to one of ordinary skill in the art to place the welting material (or piping) 12 of Mitchell in the pocket that is formed when the binding material of Hamrah is folded over. Doing so would allow the method of Hamrah to achieve the benefits of the welting material 12 disclosed by Mitchell. See page 4 of the office action dated April 18, 2006. Applicant should further note that the advantages of placing the welting material 12 of Mitchell in the pocket of Hamrah are applicable to the method of Hamrah regardless of how the band 14 of Mitchell is attached to a carpet. The manner in which the band 14 or strip 11 of Mitchell is attached to a carpet is not germane to the rejection at hand.

As to Ang et al., applicant states that Ang prefers an adhesive strip to an adhesive bead. Examiner respectfully asserts Ang clearly discloses that the method is not limited to said strip, and that use of a thermoplastic bead is a well known alternative to said strip (paragraph 0013). Examiner further asserts that even though a reference may disclose that a specific embodiment is preferred, such a disclosure does render the use of disclosed alternative methods non-obvious. MPEP 2123. Applicant argues that Ang and Callas both only teach the use of one adhesive whereas claims 2 and 3 require application of an adhesive tape and an adhesive bead. Examiner

respectfully requests that applicant consider Ang and Callas *in combination* with Hamrah and Mitchell. Even though the individual references do not disclose both the application of a strip and the application of a bead of adhesive, it is the position of the examiner that when the references are all considered *in combination*, such a method would have been obvious to one of ordinary skill in the art. One of ordinary skill in the art would have been motivated to place an adhesive bead between the binding material and the edge *in addition to* the adhesive strip 30 in the method of Hamrah. The reason one of ordinary skill in the art would have motivated to make such a modification is because Callas explicitly discloses that dirt and water can collect in between the edge and the binding material and that use of an adhesive at the location between said binding material and the edge of the material (or carpet) prevents water and dirt from collecting. Ang is used by the examiner to show that when binding a side of a material to a binding material, it is well recognized that an adhesive bead can be used as an alternative to an adhesive strip. Because Callas is binding a binding material to an edge of another material, one of ordinary skill in the art in possession of Callas and Ang would have readily recognized that an adhesive bead can be used in place of the strip of Callas. As to examiner's comments relating to claim 3 on page 5 of the previous office action, applicant is respectfully notified that examiner is not stating that Hamrah alone teaches the use of a welting material. Rather, examiner is stating the Hamrah *in combination with* Mitchell teaches the use of a welting material as a reinforcement to the edge of another material. Applicant is advised that one cannot show nonobviousness by attacking references individually and in a vacuum of each other as a rejection under 35 U.S.C. 103 is a consideration relating to the combined teachings of the references (and not each reference in a vacuum of the others). As to claim 9, examiner has added a reference

(Tolbert et al.) is response to applicant's challenge to the examiner's Official Notice. The reference confirms that it was appropriate for the examiner to take Office Notice with respect to claim 9. MPEP 2144.

With respect to section 11 of examiner's previous office action, it is not necessary for Mitchell to disclose the application of a bead of adhesive since the combination of references as discussed above render such a method obvious.

As to Kim et al. applicant should note that Kim is directed to the use of thermoplastic adhesives in bonding materials together, and examiner asserts that the advantage achieved by using metal as an RF sensitive material within a thermoplastic adhesive – preventing the materials being bonded from being subjected to high temperatures – is applicable to the method of binding an edge of a carpet with a binding fabric. One of ordinary skill in the art in possession of Kim would have readily recognized that placing a RF sensitive metal material inside a thermoplastic bead used to bind a binding fabric to the edge of a carpet would advantageously allow the thermoplastic material to activated (melted) without risking any heat damage to the binding fabric or the carpet.

### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

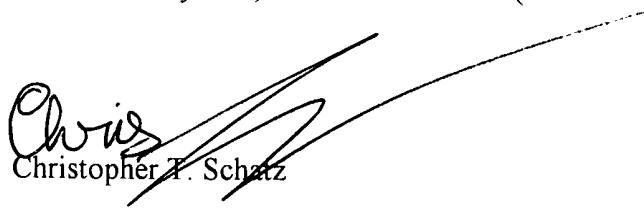
A shortened statutory period for reply to this final action is set to expire **THREE** MONTHS from the mailing date of this action. In the event a first reply is filed within **TWO**

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher T. Schatz whose telephone number is 571-272-1456. The examiner can normally be reached on 8:00-5:30, Monday -Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Christopher T. Schatz

  
RICHARD CRISPINO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700